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ABSTRACT

This study examined the concept that extent of agreement between clerical employees and their respective supervisors on competency importance would relate to satisfactoriness and job satisfaction. Data for competency agreement, satisfactoriness, and job satisfaction were analyzed and interpreted for fifty-five clerical employees who responded to a job satisfaction survey instrument. The subjects were 1972 high school graduates who had completed a stenographic program while in high school, had not continued their education beyond high school, and were employed in clerical occupations one year after graduation. Satisfactoriness scores were obtained from supervisor ratings of the subjects' performance on thirty-one job competencies and on supervisor ratings of the subjects' office behavior. Among the findings were that (1) a relationship existed between satisfactoriness and extent of agreement on competency importance and (2) no relationship existed between job satisfaction and extent of agreement on competency importance.
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SUPERVISOR-CLERICAL EMPLOYEE AGREEMENT
ON COMPETENCY IMPORTANCE
AS IT RELATES TO SATISFACTORINESS AND JOB SATISFACTION

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INTRODUCTION

The factors affecting worker satisfactoriness and workers' satisfaction with their jobs have enjoyed a long history of investigation by many researchers in a great diversity of situations. The reasons for this interest are not hard to discern. As Hulin (1963) pointed out,

The general belief in this area [has been] that satisfaction should be related to output, turnover, absenteeism, or grievances. From this premise it followed that if employee satisfaction could be increased, then output would rise, turnover and absenteeism could be reduced, etc. However, studies done . . . [recently] . . . have quite conclusively demonstrated that this premise is not true (p. 1).

In view of the findings referred to by Hulin, researchers have attempted to develop other explanations of the relationship between worker satisfactoriness, job satisfaction, and the work situation. Notable in this area is the Theory of Work Adjustment developed at the Minnesota Center for Vocational Rehabilitation (Betz, et. al., 1968) which states that:

Work adjustment is defined as the process by which the individual interacts and comes to terms with his environment. The outcome of the process is measured by two indicators: satisfactoriness and satisfaction. . . . Work adjustment is determined both by the correspondence between ability and ability requirements, and by the correspondence between reinforcer and system needs (p. 444).

Simply stated, the theory implies that the well adjusted or successful worker will be the satisfactory and the satisfied worker.

Supervision is one factor, of the many that have been investigated in relation to job satisfaction (Ewen, 1965, pp. 3-18), that is of particular interest to this study. Generally consideration for the employee on the part of the supervisor reflects a high level of satisfaction (Vroom, 1964). Further, employee-supervisor agreement on how work should be done is an important determinant of the employee's attitude toward the supervisor

and can be a source of job satisfaction (Barrett, 1964). Perhaps even more interesting, supervision plays an important role in Herzberg's two-factor theory (Herzberg, Mausner, and Snyderman, 1959) of job satisfaction-dissatisfaction. Herzberg has singled out inadequate supervision as one of the main job dissatisfiers. Although Herzberg's theory has been subject to much criticism by researchers (Ewen, 1965, pp. 26-32), it has been widely accepted and cannot be considered to be without some merit.

Supervision can be readily identified as a vital element of the job situation that may affect employee satisfactoriness as well as job satisfaction. This investigation determined the degree of importance a group of clerical employees assigned to competencies required for their jobs as compared to the importance assigned to the same competencies by their respective supervisors. Further, the extent of agreement found between each employee-supervisor pair was then examined in relation to measures of satisfactoriness and job satisfaction for each employee. The study required answers to the following questions:

- A. To what extent did the clerical employees and their respective supervisors agree on the importance of job competencies?
- B. How did the extent of agreement found in Question A relate to the satisfactoriness of the employees?
- C. How did the extent of agreement found in Question A relate to the job satisfaction of the employees?

METHODOLOGY

The 91 clerical employee subjects of the study were 1972 graduates of high schools from three sections of Virginia--Southwest, Richmond, and Tidewater. They were employed in clerical occupations one year after

graduation and had not continued their education beyond high school. Background data collected on the subjects revealed that as a group they attained above average grades in high school, scored in the mid percentile ranges on the School and College Ability Test (SCAT), and were from blue collar families.

Collection of Competency Importance Data:

Competency importance ratings for the 91 employees and their respective employers were needed in order to answer the first research question: To what extent did the clerical employees and their respective supervisors agree on the importance of job competencies? As part of a study to determine high school stenographic program effectiveness (Schmidt, 1974), instruments were developed for clerical employees to use in evaluating needed job competencies and for their supervisors to use in rating their performance. The 91 subjects of this study and their respective supervisors completed the forms during the summer of 1973.

The competencies listed on the instruments were obtained through a compilation of the work completed in the studies of Perkins (1968), Erickson (1971), and Lanham, Lanham, Herschelman, and Cook (1972). These three studies were selected because of their recency, their extensiveness, and the procedures used in them for identifying competencies needed on the job by office workers. The compilation resulted in the 31 competencies listed on the Supervisor's Form for Rating Office Employees in Appendix A and the Employee's Form for Evaluating Needed Job Competencies in Appendix B.

As illustrated below, competency importance scores on each competency for each supervisor and each employee were obtained by assigning values to the importance ratings they checked.

<u>Value</u>	<u>Competency Importance Rating</u>
0	Of no importance
1	Of slight importance
2	Of considerable importance
3	Of utmost importance

Collection of Job Satisfactoriness Data:

Job satisfactoriness ratings for the 91 subjects were needed in order to answer the second research question: How does the extent of agreement found on importance of job competencies between employees and their respective supervisors relate to satisfactoriness? Satisfactoriness scores were obtained from the forms completed by the supervisors of the 91 clerical employees (Supervisor's Form for Rating Office Employees, Appendix A).

The measurement of job performance to reflect the satisfactoriness of an employee's work has proven to be a most difficult task. As Zytowski (1968) explains, a great many factors can influence a supervisor's rating of an employee's performance. These include such variables as the output product, the type of position, the current labor market, and the cost of materials and training.

With consideration to the problems encountered in measuring satisfactoriness, the 31 competencies required by office workers identified through the literature were used as the basis for the first part of the satisfactoriness instrument--the first three pages. The supervisors evaluated the importance of each competency to the employee's job and rated the employee's performance on each competency by checking appropriate columns of the instrument.

A satisfactoriness score for each competency was obtained by multiplying the importance of the competency to the employee's job (scale of 0 to 3) by the rating the supervisor assigned the subject on the compe-

tency (scale of 0 to 3). The chart below illustrates the method of computation of the satisfactoriness score for each competency.

How important is this competency to the employee's present job?	How do you rate the employee on this competency?			
	Below Average	Average	Above Average	Outstanding
Of no importance	0	0	0	0
Of slight importance	0	1	2	3
Of considerable importance	0	2	4	6
Of utmost importance	0	3	6	9

The employee's total satisfactoriness score on the 31 competencies was then obtained by summing.

Numerous studies (James, 1963; Crews, 1961; Arnis and Perrigo, 1968; and Perkins, 1968) have substantiated the concept that satisfactoriness of clerical employees is not only measured by ability to perform required job tasks but also by personal characteristics that enable the employees to adapt to the job situation. The effect of personal behavior on clerical employee satisfactoriness is aptly summarized by Alexander (1962) who states:

Some employers rank persons having a positive office personality superior to those who excel solely in skills and knowledges. Often, they will provide extra training to improve the skills of those who have personality efficiency, rather than hire applicants who have skills but lack the flexible, easy-to-coordinate personality.

Therefore, the second part (the last page) of the satisfactoriness instrument was designed to measure undesirable office behavior characteristics. In the analysis of 300 office jobs completed in the Erickson (1971) study, two instances of critical incidents for effective and ineffective behavior of each employee were cited by the supervisors. The incidents

were then summarized by the investigator categorically into four groups of ten criteria each for effective and ineffective task and social role characteristics. On the premise that responders reply more validly to negative items (Gordon, 1971), the ineffective task and social role items identified in the Erickson study were used as the basis for the measurement of office behavior on the satisfactoriness instrument. The 20 criteria as adapted are listed in items 9 and 10 of the Supervisor's Form for Rating Office Employees.

The supervisors checked any ineffective task or social role characteristics which the subjects typically displayed on the job. Each subject's combined satisfactoriness score for the two parts of the instrument was obtained by adding 6 points for each unchecked characteristic on the second part to the satisfactoriness score total for the 31 competencies on the first part.

Collection of the Job Satisfaction Data:

Job satisfaction ratings for the 91 clerical employee subjects were needed in order to answer the third research question: How does the extent of agreement found on the importance of job competencies between employees and their respective supervisors relate to job satisfaction? The Job Description Index (JDI) and the General Motors Faces Scale were selected as the instruments to evaluate job satisfaction of the subjects.

The JDI, developed as part of a nationwide survey of retirement satisfaction, was subjected to an intensive validation program (Hulin, 1961; Kendall, 1961; Locke, 1961; Mccauley, 1961; and Smith, 1961). The Campbell and Fiske (1959) multitrait-multimethod technique to determine convergent and discriminant validity of the measure was utilized in the validation process. The index is an adjective checklist which measures

satisfaction with five aspects of the job: the work itself, the supervision, the coworkers, the pay, and promotion. The instrument was, therefore, particularly appropriate for this study in that a separate satisfaction score was obtained for the supervision element. Even (1965) notes that reliabilities of the various JDI scales are quite satisfactory, 0.80 or higher; and Vroom (1964) describes the instrument as follows:

. . . without doubt the most carefully constructed measure of job satisfaction in existence today. The extensive methodological work underlying this measure as well as the available norms should insure its widespread use in both research and practice (p. 100).

The General Motors Faces scale which provides a measure of global satisfaction is a one-item graphic scale developed by Kunin (1955). It consists of nine faces presented in varying degrees from a very large frown to a very large smile. Subjects are simply asked to check the faces that most closely represent the way they feel about their jobs as a whole. Reliability of the instrument is not provided by Kunin.

On October 23, 1973, the job satisfaction instruments were sent to the 91 subjects. As part of the job satisfaction form, each subject was asked to give the number of months employed on the present job. This provided a means for determining whether the employee was still on the same job as when the competency importance data and the job satisfactoriness data had been obtained. A cover letter explaining the purpose of the study and a stamped, self-addressed envelope were also sent to each subject. A copy of the Job Satisfaction Form can be found in Appendix C.

On November 1, the subjects were sent a follow-up post card encouraging them to return the Job Satisfaction Forms. Through this procedure a satisfactory rate of response for the Job Satisfaction Forms was achieved. As indicated by the data in Table 1, 65.9 percent of the forms were returned and 60.4 percent were usable.

Table 1. Satisfaction Form Responses--Number and Percent

	Number	Percent
Total forms sent	91	100.0
Less forms not returned	<u>31</u>	<u>34.1</u>
Forms returned	60	65.9
Less non-usable forms returned*	<u>5</u>	<u>5.5</u>
Usable forms retur	55	60.4

*Non-usable due to the fact that the employee had changed jobs since collection of the competency and satisfactoriness data

Scoring of the JDI was consistent with the procedure described by Smith, Kendall, and Hulin (1969) where a response in the satisfied direction received the value of 3, a "?" received the value of 1, and a response in the dissatisfied direction received a value of 0. Scores were obtained for each component of the JDI. The General Motors Faces scale of global satisfaction was scored on a scale of 1 to 9, with the happiest face assigned a value of 9.

Data Analysis Procedures:

To answer the research questions, the computational and statistical procedures described below were used.

Research Question A: To what extent do clerical employees and their respective supervisors agree on the importance of job competencies? The competency importance rating data obtained from the form completed by each supervisor (Supervisor's Form for Rating Office Employees, Appendix A) and from the form completed by each employee (Employee's Form for Evaluating Needed Job Competencies, Appendix B) were used to answer this question. The competency importance ratings assigned by each supervisor and each employee were processed by a computer program developed to obtain four types of agreement (or disagreement) scores:

- ABDF score - the total absolute difference between the supervisor's and the employee's rating of each competency
- DIFF score - the total numerical difference between the supervisor's and the employee's rating of each competency
- NMIN score - the total number of minus differences or the total number of instances in which the supervisor perceived of the competency as being more important than the employee
- NMIZ score - the total number of minus differences plus the total number of zero differences--instances in which the supervisor perceived of the competency as being more important than the employee or of the same importance as the employee

Use of the four scores allowed for a more thorough examination of the relationship between agreement on the importance of job competencies to satisfactoriness and satisfaction than simply obtaining the absolute difference score would have allowed.

Research Question B: How does the extent of agreement found in Question A relate to the satisfactoriness of the clerical employees? The scores obtained in answer to Research Question A and the satisfactoriness scores obtained from the Supervisor's Form for Rating Office Employees were needed to answer this question. Two satisfactoriness scores for each subject were computed, a combined satisfactoriness score (SATA) for the 31 competencies and for the task and social role characteristics and a satisfactoriness score (SATB) for the 31 competencies only. Correlations were computed to determine relationships among the four agreement scores and the two satisfactoriness scores.

Research Question C: How does the extent of agreement found in Question A relate to the job satisfaction of the clerical employees? The scores obtained to answer Research Question A and the job satisfaction scores obtained from the JDI and the General Motors Faces Scale (Appendix C) were needed to answer this question. Five scores were computed for the JDI--work (WORK), people (PEOPL), pay (PAY), promotion (PROM), and supervision (SUPV) and one score (GLOBL) for the Faces Scale. Correlations were computed to determine relationships among the four agreement scores and the six satisfaction scores.

ANALYSIS AND INTERPRETATION OF THE DATA

As an initial step in analyzing the data, variable score means and standard deviations were computed for the total group of 91 clerical employee subjects; for the 55 subjects that returned usable job satisfaction

forms; and for a subgroup of the 55 subjects, 36 subjects who were employed as stenographers. Outcomes of the computations can be found in Appendix D. Visual inspection of the means and standard deviations reveals that scoring for the three subject groups on all variables is highly similar.

Comparison of Correlation Matrices for the Subject Groups:

Variable score correlation matrices computed for the three subject groups are provided in Appendix E. To determine if a correlation between two variable scores for the three groups could be considered as the same correlation, the Walker and Lev (1953) procedure for testing that populations have the same correlation was used. Application of the procedure to the correlation values having the largest difference failed to reveal any correlations that could be considered as different for the three groups.

For example, the correlation between the variables NMN and ABDF is -0.041 for the 91 subjects, -0.212 for the 55 subjects, and -0.326 for the 36 subjects. The test to determine if the correlation for the 91 subjects was different from the correlation for the 36 subjects failed to give significant results. Hence, one would have to conclude that the two populations have the same correlation for the variables NMN and ABDF. Since the correlation value for the 55 subjects (-0.212) falls between the other two correlations, the correlation values for all three subject groups cannot be considered as being different.

Due to the similarity of the variable score means, the standard deviations, and the correlation matrices and due to the failure of the statistical tests to reveal that the correlations from the three groups could be considered as different, further discussion concerning the interpretation of the correlations has been restricted to the 55 clerical employees

who returned usable responses to the job satisfaction form.

The Relationship Between the Agreement Score Variables and Job Satisfactoriness:

The intercorrelations for the agreement score and the job satisfactoriness score variables for the 55 subject group are presented in Table 2. Since the satisfactoriness score variables (SATA and SATB) are highly correlated, 0.974, they can be considered as measuring the same thing. Hence the similarity of correlations for SATA and SATB with all of the other variables.

Of interest is the high negative correlation, -0.904, of the NMIZ variable (number of times the supervisor considered the competency more important or of the same importance as the employee) with the DIFF (numerical difference) variable. This correlation indicates that the two variables are most likely measuring the same thing in an opposite direction. The same holds true for the high negative correlation, -0.859, between the variable NMIN (number of times the supervisor considered the competency more important) and the DIFF variable.

The correlations between the satisfactoriness scores and the agreement scores indicate the following:

1. As the absolute difference (ABDF) and the numerical difference (DIFF) scores increase, satisfactoriness scores decrease. Hence the negative correlations between satisfactoriness and these scores. Although all of the correlations are significant at the .01 level, the higher ones for the numerical difference (DIFF) scores, -0.503 and -0.515, indicate that this is probably a better measure of the extent of disagreement on the competencies.
2. As the number of times the employer considered the competency as

Table 2. Intercorrelations of the Agreement and the Satisfactoriness
Score Variables for the 55 Subject Group

	ABDF	DIFF	NMIN	NMIZ	SATA	SATB
ABDF	--	0.625**	-0.212	-0.671**	-0.367**	-0.386**
DIFF		--	-0.859**	-0.904**	-0.503**	-0.515**
NMIN			--	0.687**	0.404**	0.419**
NMIZ				--	0.505**	0.498**
SATA					--	0.974**
SATB						--

* $p < .05$

** $p < .01$

being more important than the employee (NMIN) increases, the satisfactoriness score increases. Hence the positive correlation between satisfactoriness and this variable. The same relationship holds true for the number of times the employer considered the competency more important or of the same importance as the employee (NMIZ).

The above observations imply that the more satisfactory clerical employee is, first, the one whose supervisor considers the same competencies important as the employee does and is, second, the one whose supervisor considers the competencies required of the employee more important or at least as important as the employee does.

Relationship Between the Agreement Score Variables and Job Satisfaction:

Before the relationship between the agreement score variables and job satisfaction can be discussed, the job satisfaction variable outcomes must be examined. Table 3 lists the intercorrelations of the JDI scores (WORK, PEOP, PAY, PROM, and SUPV) and the General Motors Faces Scale scores (GLOBL) for the 55 subjects that returned usable job satisfactions forms.

The high positive correlations, all significant at the .01 level, indicate that the variables are measuring the same thing. Of particular interest is the extent of relationship between the JDI scores for supervision and the other satisfaction scores. No tendency exists for the employees to be more or less satisfied with supervision than any of the other elements of job satisfaction.

Table 4 gives the number and percent of responses to the Global Faces Scale at each level of satisfaction. Readily discernable from the table is the fact that this was a highly satisfied group--72.7 percent (25.4 percent + 20.0 percent + 18.2 percent + 9.1 percent) of the group at the satisfied end of the Scale, including 25.4 percent extremely satisfied. In keeping

Table 3. Intercorrelations for the Job Satisfaction Score Variables
for the 55 Subject Group

	WORK	PEOPL	PAY	PROM	SUPV	GLOBL
WORK	--	0.667**	0.507**	0.506**	0.604**	0.734**
PEOPL		--	0.482**	0.384**	0.589**	0.616**
PAY			--	0.631**	0.422**	0.610**
PROM				--	0.426**	0.546**
SUPV					--	0.595**
GLOBL						--

* p < .05

** p < .01

Table 4. Number and Percent of Responses at Each Level of the Global Faces Scale

Level	Description	No. of Responses	Percent
9th	Extremely satisfied	14	25.4
8th		11	20.0
7th		10	18.2
6th		5	9.1
5th	Neutral	9	16.4
4th		2	3.6
3rd		4	7.3
2nd		0	0.0
1st	Extremely dissatisfied	0	0.0
		55	100.0

with Herzberg's curvilinear theory of job satisfaction (Herzberg, et. al., 1957), the group exhibits a homogeneous tendency toward high job satisfaction.

Homogeneousness of a variable can influence the outcome of correlation calculations. Roscoe (1969) discussing the interpretation of correlations states: "A correlation coefficient calculated from a group having a wide range of talent will be larger than that from a group which is quite homogeneous on one or both variables (p. 77)." Outcomes of the correlations for the agreement and the job satisfaction score variables given in Table 5 reflect the homogeneous tendency of the subject group on the job satisfaction variables. Only one of the correlations is significant at the .05 level and this outcome could be expected by chance alone when considering 24 correlations.

Therefore, to determine if extent of agreement on importance of competencies between clerical employees and their respective supervisors is related to job satisfaction, further investigation with a more dispersely satisfied population would be needed.

SUMMARY

This study uniquely examined the concept that extent of agreement between clerical employees and their respective supervisors on competency importance would relate to satisfactoriness and job satisfaction. Data for competency agreement, satisfactoriness, and job satisfaction were analyzed and interpreted for 55 clerical employees who responded to a job satisfaction survey instrument. The 55 usable job satisfaction forms represented a 60.4 percent return.

The subjects were 1972 high school graduates who had completed a stenographic program while in school, had not continued their education

Table 5. Correlations of the Agreement and the Job Satisfaction
Score Variables for the 55 Subject Group

	WORK	PEOPL	PAY	PROM	SUPV	GLOBL
ABDF	0.023	-0.049	0.020	0.199	0.016	0.082
DIFF	0.229	0.137	0.149	0.173	0.239	0.252
NMIN	-0.232	-0.169	-0.201	-0.089	-0.291*	-0.256
NMIZ	-0.170	-0.054	-0.124	-0.155	-0.211	-0.215

* p .05

** p .01

beyond high school, and were employed in clerical occupations one year after graduation. Satisfactoriness scores were obtained from supervisor ratings of the subjects' performance on 31 on-the-job competencies and on supervisor ratings of the subjects' office behavior. The job satisfaction instrument consisted of the Job Description Index (JDI) and the General Motors Faces Scale. Accordingly, six measures of job satisfaction, five from the JDI (work, people, pay, promotion, and supervision) and one from the Faces Scale (global), were obtained.

Interpretation of the correlation matrix for the agreement, the satisfactoriness, and the job satisfaction score variables revealed the following:

1. A relationship existed between satisfactoriness and extent of agreement on competency importance. First, as satisfactoriness increased, extent of disagreement decreased. And second, as the supervisor tended to perceive of the competencies as being more important or at least as important, the employee tended to be more satisfactory. These findings indicate that clerical employee satisfactoriness may be improved when the supervisor informs the employee what competencies are important. Also, satisfactoriness may depend on the extent that the supervisor considers the competencies of the employee as important.

2. No relationship existed between job satisfaction and extent of agreement on competency importance. However, the correlations were, no doubt, affected by a homogeneous tendency of the 55 subjects toward a high degree of job satisfaction. To determine if extent of agreement on competency importance relates to job satisfaction, investigators need to study more dispersely satisfied populations.

Outcomes of the study imply that extent of agreement between supervisor-employee pairs on competency importance as it relates to satisfactoriness and to job satisfaction merits further study. The findings, that extent

of agreement relates to satisfactoriness and not to satisfaction, need to be substantiated for other more diverse populations, for other occupational groups, and for other measures of satisfactoriness and satisfaction.

REFERENCES

- Alexander, A. V. Plus quality in human relations spells business success. Journal of Business Education, January, 1962, 37, 170.
- Arnis, W. H. and Perrigo, J. E. A pilot study to determine the need for curriculum modification in vocational-technical education in New Hampshire. Concord, New Hampshire: State Department of Education, Research Coordinating Unit for Vocational-Technical Education, 1968, 99 pp. ED 027 405
- Barrett, R. S. Explorations in job satisfaction and performance rating. Personnel Administration, September-December, 1964, 27, 14-17.
- Betz, E., Weiss, D. J., Dawis, R., England, C. W., and Lofquist, L. H. A concept of work adjustment in Vocational Behavior: Readings in Theory and Research edited by Zytowski, D. G. New York: Holt, Rinehart, and Winston, 1968, 443-449.
- Campbell, D. T. and Fiske, D. W. Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 1959, 56, 81-105.
- Crews, J. W. Standards and qualifications for office employees. Business Education Forum, May, 1961, 15, 11-14.
- Erickson, L. W. Basic components of office work--an analysis of 300 office jobs. Cincinnati, Ohio: Southwestern Publishing Company, Monograph No. 123, 1971.
- Ewen, R. B. Weighting components of job satisfaction. Unpublished doctoral dissertation, University of Illinois, 1965.
- Gordon, L. Are there two extremeness response sets? Educational and Psychological Measurement, Winter, 1971, 34, 867-873.
- Heron, A. Satisfaction and Satisfactoriness. Occupational Psychology, 1954, 28, 140-153.
- Herzberg, F., Mausner, B. and Snyderman, B. The Motivation to Work, Second Edition. New York: Wiley, 1959.
- Herzberg, F., Mausner, B., Peterson, R. O. and Capwell, D. F. Job Attitudes: Review of Research and Opinion. Pittsburgh: Psychological Service of Pittsburgh, 1957.
- Hulin, C. L. A linear model of job satisfaction. Unpublished doctoral dissertation, Cornell University, 1963.
- Hulin, C. L. Cornell studies in methods of measuring job satisfaction: I - A systematic approach to the measurement of job satisfaction. Paper presented to the APA annual meetings, New York, 1961.

- James, T. A comparison of criteria utilized by employers in employing and promoting beginning stenographic-secretarial workers. Unpublished doctoral dissertation, New York University, 1963.
- Kendall, L. M. Cornell studies in measuring job satisfaction: III - The relative validity of different methods of measurement for predicting criteria of job satisfaction. Paper presented to the APA annual meeting, New York, 1961.
- Kunin, T. The construction of a new type of attitude measure. Personnel Psychology, 1955, 8, 65-77.
- Lanham, F. W., Lanham, C. P., Herschelmann, K. M., and Cook, F. S. Development of task performance statements for a new office and business educational learning system, Columbus, Ohio: The Center for Vocational and Technical Education, the Ohio State University September, 1972, 361 pp.
- Locke, E. A. Cornell studies in methods of measuring job satisfaction: IV - Importance and satisfaction in several job areas. Paper presented to the APA annual meetings, New York, 1961.
- Mccauley, D. A. Cornell studies in methods of measuring job satisfaction: II - Development of criteria of job satisfaction. Paper presented to the APA annual meetings, New York, 1961.
- Perkins, E. A. Clusters of tasks associated with performance of major types of office work, USOE Project No. 4-7-0031-1626, January, 1968, 210 pp. ED 018 665
- Roscoe, J. T. Fundamental Research Statistics for the Behavioral Sciences. New York: Holt, Rinehart, and Winston, Inc., 1969.
- Schmidt, B. J. A study of the preparation and employment of graduates from two types of high school stenographic programs in Virginia. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, 1974.
- Smith, P. C. Cornell studies in methods of measuring job satisfaction: Introduction and scope. Paper presented to APA annual meetings, New York, 1961.
- Smith, P. C., Kendall, L. M. and Hulin, C. L. The Measurement of Satisfaction in Work and Retirement, Chicago: Rand McNally, 1969.
- Vroom, V. H. Work and Motivation, New York: Wiley, 1964.
- Walker, H. M. and Lev, J. Statistical Inference, New York: Henry Holt and Company, 1953, pp. 255-256.
- Zytowski, D. G., Editor, Vocational Behavior: Readings in Theory and Research, New York: Holt, Rinehart, and Winston, 1968.

APPENDIX A

SUPERVISOR'S FORM FOR RATING OFFICE EMPLOYEES

**SUPERVISOR'S FORM FOR RATING
OFFICE EMPLOYEES**

How important is this competency to the employee's present job?

How do you rate the employee on this competency?

COMPETENCY

- ## 1. COMMUNICATING WITH OTHERS

- 1.1 Receiving, giving, and evaluating information orally
(by phone)
- 1.2 Receiving, giving, and evaluating information orally
(by personal contact)
- 1.3 Composing written or typed messages
- 1.4 Meeting callers, making introductions, or directing people
to proper offices
- 1.5 Directing and instructing other employees

- ## 2. TYPEWRITING

- 2.1 Preparing correspondence, reports, or other items from rough draft
- 2.2 Positioning and typing information on forms
- 2.3 Proofreading and correcting one's own work
- 2.4 Preparing spirit, stencil, or offset masters

- ### 3. TAKING AND TRANSCRIBING DICTATION

- 3.1 Writing shorthand notes

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SUPERVISOR'S FORM FOR RATING
OFFICE EMPLOYEES

COMPETENCY

How important is
this competency
to the employee's
present job?

How do you rate
the employee on
this competency?

Of no importance
Of slight importance
Of considerable importance
Of utmost importance

Below average
Average
Above average
Outstanding

- 3.2 Transcribing shorthand notes
- 3.3 Transcribing from recorded media
- 4. COLLECTING AND DISTRIBUTING
 - 4.1 Dispensing, ordering, and maintaining office supplies,
forms, etc.
 - 4.2 Preparing outgoing mail
 - 4.3 Handling incoming mail
 - 4.4 Assembling and distributing duplicated materials
- 5. SORTING, FILING, AND RETRIEVING
 - 5.1 Arranging, coding, or filing information in a
prescribed manner
 - 5.2 Searching, locating, or recovering information
 - 5.3 Sorting or matching information (for example,
numerically or alphabetically)
- 6. CHECKING AND COMPUTING
 - 6.1 Editing papers and reports for completeness and
conformance

	Of no importance	Of slight importance	Of considerable importance	Of utmost importance	Below average	Average	Above average	Outstanding
3.2 Transcribing shorthand notes								
3.3 Transcribing from recorded media								
4. COLLECTING AND DISTRIBUTING								
4.1 Dispensing, ordering, and maintaining office supplies, forms, etc.								
4.2 Preparing outgoing mail								
4.3 Handling incoming mail								
4.4 Assembling and distributing duplicated materials								
5. SORTING, FILING, AND RETRIEVING								
5.1 Arranging, coding, or filing information in a prescribed manner								
5.2 Searching, locating, or recovering information								
5.3 Sorting or matching information (for example, numerically or alphabetically)								
6. CHECKING AND COMPUTING								
6.1 Editing papers and reports for completeness and conformance								

SUPERVISOR'S FORM FOR RATING
OFFICE EMPLOYEES

COMPETENCY

How important is
this competency
to the employee's
present job?

How do you rate
the employee on
this competency?

Of no importance
Of slight importance
Of considerable importance
Of utmost importance

Below average
Average
Above average
Outstanding

6.2 Compiling reports and documents from other data sources . . .

6.3 Making simple calculations (mentally, by hand, or
by machine)

6.4 Handposting items from one record to another

7. OPERATING BUSINESS MACHINES

7.1 Using an adding machine

7.2 Using a calculator

7.3 Using a duplicating machine (spirit, stencil, or offset) . .

7.4 Using a copying machine (xerox, thermofax, etc.)

7.5 Using data processing equipment (keypunch, verifier,
etc.)

8. OTHER COMPETENCIES

8.1 Determining work priorities for self

8.2 Obtaining travel reservations

8.3 Using computer printouts

9. Does the employee typically exhibit any of the following ineffective task characteristics? If she does, place a check mark on the line.

- 9.1 Lacks job knowledge and fails to understand job's function within the office system _____
- 9.2 Unable to accept or use criticism about work _____
- 9.3 Allows personal feeling and emotions to affect work _____
- 9.4 Lacks interest in job or lacks concern for job and office responsibilities _____
- 9.5 Avoids rather than faces issues _____
- 9.6 Allows personal business to take precedence over office business _____
- 9.7 Allows boredom to cause carelessness _____
- 9.8 Assumes a "get by" attitude _____
- 9.9 Fails to organize time _____
- 9.10 Trusts too much to memory (fails to use references or to record information) _____

10. Does the employee typically exhibit any of the following ineffective social role characteristics? If she does, place a check mark on the line.

- 10.1 Fails to understand how job performance affects others _____
- 10.2 Insensitive to the needs of others _____
- 10.3 Reacts emotionally to job demands and pressures _____
- 10.4 Overbearing, haughty, and argumentative _____
- 10.5 Unable to overcome personality conflicts _____
- 10.6 Lacks respect for others _____
- 10.7 Shy and introverted personality _____
- 10.8 Uncontrollable temper _____
- 10.9 Unable to exercise needed firmness because of overconcern with the feelings of others _____
- 10.10 Resents authority _____

APPENDIX B
EMPLOYEE'S FORM FOR EVALUATING NEEDED JOB
COMPETENCIES

EMPLOYEE'S FORM FOR EVALUATING
NEEDED JOB COMPETENCIES

COMPETENCY

1. COMMUNICATING WITH OTHERS

- 1.1 Receiving, giving, and evaluating information orally (by phone)
- 1.2 Receiving, giving, and evaluating information orally (by personal contact)
- 1.3 Composing written or typed messages
- 1.4 Meeting callers, making introductions, or directing people to proper offices
- 1.5 Directing and instructing other employees

2. TYPEWRITING

- 2.1 Preparing correspondence, reports, or other items from rough draft
- 2.2 Positioning and typing information on forms
- 2.3 Proofreading and correcting one's own work
- 2.4 Preparing spirit, stencil, or offset masters

How often is this competency required for your present job?

Often (at least twice a week)
Occasionally
Never
Daily

How important is this competency for your present job?

Of no importance
Of slight importance
Of considerable importance
Of utmost importance

Did you first learn this competency in your high school business classes?

Yes No

**EMPLOYEE'S FORM FOR EVALUATING
NEEDED JOB COMPETENCIES**

How often is this competency required for your present job?

How important is this competency for your present job?

Did you first learn this competency in your high school business classes?

COMPETENCY

Often (at least twice a week) Daily
Occasionally
Never

Of utmost importance
Of considerable importance
Of slight importance
Of no importance

Yes No

- ### 3. TAKING AND TRANSCRIBING DICTATION

- 3.1 Writing shorthand notes
- 3.2 Transcribing shorthand notes
- 3.3 Transcribing from recorded media

- #### 4. COLLECTING AND DISTRIBUTING

- 4.1 Dispensing, ordering, and maintaining office supplies, forms, etc.
- 4.2 Preparing outgoing mail
- 4.3 Handling incoming mail
- 4.4 Assembling and distributing duplicated materials

EMPLOYEE'S FORM FOR EVALUATING
NEEDED JOB COMPETENCIES

COMPETENCY

How often is
this competency
required for your
present job?

How important is
this competency
for your present
job?

Did you first
learn this compe-
tency in your
high school
business classes?

5. SORTING, FILING, AND RETRIEVING

5.1 Arranging, coding, or filing information in
a prescribed manner

5.2 Searching, locating, or recovering infor-
mation

5.3 Sorting or matching information (for example,
numerically or alphabetically)

6. CHECKING AND COMPUTING

6.1 Editing papers and reports for completeness
and conformance

6.2 Compiling reports and documents from other
data sources

6.3 Making simple calculations (mentally, by
hand, or by machine)

6.4 Handposting items from one record to another . .

Often (at least twice
a week)
Occasionally
Never
Daily

Of utmost importance
Of considerable
importance
Of slight
importance
Of no importance

Yes No

EMPLOYEE'S FORM FOR EVALUATING
NEEDED JOB COMPETENCIES

COMPETENCY

How often is
this competency
required for your
present job?

How important is
this competency
for your present
job?

Did you first
learn this compe-
tency in your
high school
business classes?

Often (at least twice
a week)
Occasionally
Never

Of utmost importance
Of considerable
importance
Of slight
importance
Of no importance

Yes No

7. OPERATING BUSINESS MACHINES

- 7.1 Using an adding machine
- 7.2 Using a calculator
- 7.3 Using a duplicating machine (spirit, stencil,
or offset)
- 7.4 Using a copying machine (xerox, thermofax,
etc.)
- 7.5 Using data processing equipment (keypunch,
verifier, etc.)

8. OTHER COMPETENCIES

- 8.1 Determining work priorities for self
- 8.2 Obtaining travel reservations
- 8.3 Using computer printouts

APPENDIX C
JOB SATISFACTION FORM

Before completing the Job Satisfaction Form below and on the other side of this sheet, answer the following question.

How long have you been employed on your present job?

(number of months)

JOB SATISFACTION FORM

Think of your present work. What is it like most of the time? In the blank beside each word given below, write

- y for "yes" if it describes the work
 n for "no" if it does NOT describe it
 ? if you cannot decide

WORK ON PRESENT JOB

- Fascinating
 Routine
 Satisfying
 Boring
 Good
 Creative
 Respected
 Hot
 Pleasant
 Useful
 Tiresome
 Healthful
 Challenging
 On your feet
 Frustrating
 Simple
 Endless
 Gives sense of accomplishment

Think of the majority of the people that you work with now or the people you meet in connection with your work. How well does each of the words below describe these people? In the blank beside each word, write

- y if it describes the people you work with
 n if it does NOT describe them
 ? if you cannot decide

PEOPLE ON PRESENT JOB

- Stimulating
 Boring
 Slow
 Ambitious
 Stupid
 Responsible
 Fast
 Intelligent
 Easy to make enemies
 Talk too much
 Smart
 Lazy
 Unpleasant
 No privacy
 Active
 Narrow interests
 Loyal
 Hard to meet

(OVER →)

Think of the pay and of the opportunities for promotion on your job. How well does each of the words below describe them? In the blank beside each word, write

- y if it describes your pay or your opportunities for promotion
n if it does NOT describe them
? if you cannot decide

 PRESENT PAY

- ___ Income adequate for normal expenses
 ___ Satisfactory profit sharing
 ___ Barely live on income
 ___ Bad
 ___ Income provides luxuries
 ___ Less than I deserve
 ___ Highly paid
 ___ Underpaid

OPPORTUNITIES FOR PROMOTION

- ___ Good opportunities for promotion
 ___ Opportunity somewhat limited
 ___ Promotion on ability
 ___ Dead-end job
 ___ Good chance for promotion
 ___ Unfair promotion policy
 ___ Infrequent promotions
 ___ Regular promotions
 ___ Fairly good chance for promotion

Think of the kind of supervision you get on your job. How well does each of the words below describe this supervision? In the blank beside each word, write

- y if it describes the supervision you get on your job
n if it does NOT describe it
? if you cannot decide

 SUPERVISION ON PRESENT JOB

- ___ Asks my advice
 ___ Hard to please
 ___ Impolite
 ___ Praises good work
 ___ Tactful
 ___ Influential
 ___ Up-to-date
 ___ Doesn't supervise enough
 ___ Quick tempered
 ___ Tells me where I stand
 ___ Annoying
 ___ Stubborn
 ___ Knows job well
 ___ Bad
 ___ Intelligent
 ___ Leaves me on my own
 ___ Around when needed
 ___ Lazy

Below are nine symbolic faces which range from extremely happy to extremely unhappy. The face in the middle is neutral in that it is neither happy nor unhappy. Think about your present job and select the face which best represents how happy (satisfied) or unhappy (dissatisfied) you are with it. Make an "X" through the face that you select.



APPENDIX D
VARIABLE SCORE MEANS AND STANDARD DEVIATIONS

Variable Score Means and Standard Deviations for all 91 Subjects

Variable	Description	Scoring Code	Mean	Standard Deviation
ABDF	Absolute difference score on competency importance ratings for supervisor-employee pairs	0-93	24.5	8.8
DIFF	Numerical difference score on competency importance ratings for supervisor-employee pairs	(-93)-(+93)	10.1	17.0
NMIN	Number of minus differences--instances in which the supervisor rated the competency more important than the employee	0-31	5.0	4.7
NMIZ	Number of minus differences plus number of zeroes--instances in which the supervisor rated the competency more important than or of the same importance as the employee	0-31	19.7	6.5
SATA	Employee satisfactoriness score on the 31 competencies plus the task and social role satisfactoriness score	0-399	202.1	53.7
SATB	Employee satisfactoriness score on the 31 competencies	0-279	89.3	49.4

Variable Score Means and Standard Deviations for the 55 Subjects that
Returned Usable Job Satisfaction Forms

Variable	Description	Scoring Code	Mean	Standard Deviation
ABDF	Refer to page 36.	0-93	25.2	7.4
DIFF	Refer to page 36.	(-93)-(+93)	12.7	14.8
NMIN	Refer to page 36.	0-31	4.1	3.5
NMIZ	Refer to page 36.	0-31	18.4	6.3
SATA	Refer to page 36.	0-399	195.8	50.7
SATB	Refer to page 36.	0-279	83.5	46.7
WORK	The JDI component work	0-54	37.1	8.9
PEOPL	The JDI component people	0-54	43.2	10.1
PAY	The JDI component pay	0-24	13.7	7.4
PROM	The JDI component promotion	0-27	13.1	8.9
SUPV	The JDI component supervision	0-54	43.7	10.1
GLOBL	The General Motors Faces global satisfaction score	0-9	6.9	1.9

Variable Score Means and Standard Deviations for the 36 Stenographic
Employee Subjects That Returned Usable Job Satisfaction Forms

Variable	Description	Scoring Code	Mean	Standard Deviation
ABDF	Refer to page 36.	0-93	25.2	7.3
DIFF	Refer to page 36.	(-93)-(+93)	13.0	15.5
NMIN	Refer to page 36.	0-31	4.2	3.7
NMIZ	Refer to page 36.	0-31	17.8	6.5
SATA	Refer to page 36.	0-399	204.6	51.9
SATB	Refer to page 36.	0-279	98.8	46.8
WORK	The JDI component work	0-54	38.6	8.3
PEOPL	The JDI component people	0-54	44.1	8.9
PAY	The JDI component pay	0-24	15.1	7.2
PROM	The JDI component promotion	0-27	14.4	8.7
SUPV	The JDI component supervision	0-54	44.8	9.3
GLOBL	The General Motors Faces global satisfaction score	0-9	7.0	2.0

APPENDIX E
CORRELATION MATRICES

Correlation Matrix of Variable Scores for All 91 Subjects

	ABDF	DIFF	NMIN	NMIZ	SATA	SATB
ABDF	--	0.501	-0.081	-0.629	-0.350	-0.367
DIFF		--	-0.863	-0.897	-0.499	-0.544
NMIN			--	0.684	0.380	0.430
NMIZ				--	0.471	0.495
SATA					--	0.975
SATB						--

for n = 91

critical $r = \pm 0.205$; $p = .05$

critical $r = \pm 0.267$; $p = .01$

Correlation Matrix of Variable Scores for the 55 Subjects That Returned Usable Job Satisfaction Forms

	ABDF	DIFF	NMIN	NMIZ	SATA	SATB	WORK	PEOPL	PAY	PROM	SUPV	GLOBL
ABDF	--	0.625	-0.212	-0.671	-0.367	-0.386	-0.023	-0.049	0.020	0.199	0.016	0.082
DIFF		--	-0.859	-0.904	-0.503	-0.515	0.229	0.137	0.149	0.173	0.239	0.252
NMIN			--	0.687	0.404	0.419	-0.232	-0.169	-0.201	-0.089	-0.291	-0.256
NMIZ				--	0.505	0.498	-0.170	-0.054	-0.124	-0.155	-0.211	-0.215
SATA					--	0.974	0.127	0.198	0.343	0.246	0.014	0.074
SATB						--	0.148	0.219	0.364	0.268	0.073	0.099
WORK							--	0.667	0.507	0.506	0.644	0.734
PEOPL								--	0.482	0.384	0.589	0.616
PAY									--	0.631	0.442	0.610
PROM										--	0.426	0.546
SUPV											--	0.595
GLOBL												--

for n = 55

Critical $r = \pm 0.262$; $p = .05$

Critical $r = \pm 0.338$; $p = .01$

Correlation Matrix of Variable Scores for the 36 Subjects Employed as Stenographers Who Returned Usable Job Satisfaction Forms

	ABDF	DIFF	NMIN	NMIZ	SATA	SATB	WORK	PEOPL	PAY	PROM	SUPV	GLOBL
ABDF	--	0.697	-0.326	-0.714	-0.401	-0.452	0.141	-0.102	0.086	0.222	0.061	0.169
DIFF		--	-0.879	-0.910	-0.520	-0.564	0.176	-0.074	0.086	0.027	0.065	0.160
NMIN			--	0.732	0.439	0.478	-0.156	0.014	-0.130	0.081	-0.118	-0.128
NMIZ				--	0.545	0.583	-0.190	0.133	-0.055	-0.038	-0.119	-0.138
SATA					--	0.969	0.056	0.305	0.317	0.217	0.057	0.101
SATB						--	0.077	0.299	0.352	0.232	0.124	0.121
WORK							--	0.680	0.562	0.456	0.657	0.774
PEOPL								--	0.614	0.412	0.456	0.645
PAY									--	0.592	0.523	0.651
PROM										--	0.416	0.536
SUPV											--	0.593
GLOBL												--

for $n = 36$

critical $r = \pm 0.325$; $p = .05$

critical $r = \pm 0.418$; $p = .01$